

# **Division of Capital Asset Management**

The Commonwealth's Real Estate and Construction Agency

Scope of DCAM's Services to State Agencies:

- Planning
- Design
- Construction
- Capital Repairs and Improvements
- Contractor Certification and Compliance
- Leasing
- Asset Management
- Real Estate Acquisition and Disposition

# DCAM manages approx. \$300 million in capital projects annually

DCAM's projects are divided among 6 major investment programs and the Agencies who serve those programs:

- Judiciary
- Higher Education (including UMass, State/Community Colleges)
- Administration and Finance (including DCAM's own projects)
- Public Safety
- Health and Human Services
- Environmental Agencies

## DCAM's Sustainable Design Program

- Sustainable Design for New Construction & Major Renovation Projects
- Energy Savings Performance Contracts for Efficiency Upgrades at Existing Facilities

# Sustainable Design for New Construction & Major Renovation

- Sustainable Design Guidelines (Form 9)
  - Establishes norms & expectations for the complete range of project activities:
    - energy use / modeling / LCCA
    - materials / IAQ
- Standard Specification
  - New “green spec” will be standard spec
  - to be issued later 2005

# Sustainable Design for New Construction & Major Renovation

- LEED
  - LEED Silver is working standard for most new construction projects
- Energy Performance
  - LCCA used to determine “best” systems
  - Considering % improvement standard for performance above MA Energy Code

# Cape Cod Community College Technology Building

- DiMella Shaffer Architects
- DCAM's 1st LEED Project
- LEED Gold (to be completed in 2005)
- 26,500 SF - classrooms, offices, etc.
  - 29 kW PVs
  - Stormwater re-use system
  - Daylighting & advanced building controls
- 8% more expensive than “standard” (most due to PVs)
- 7% more time to construct (most due to IAQ considerations)

# Cape Cod Community College – West Barnstable, MA

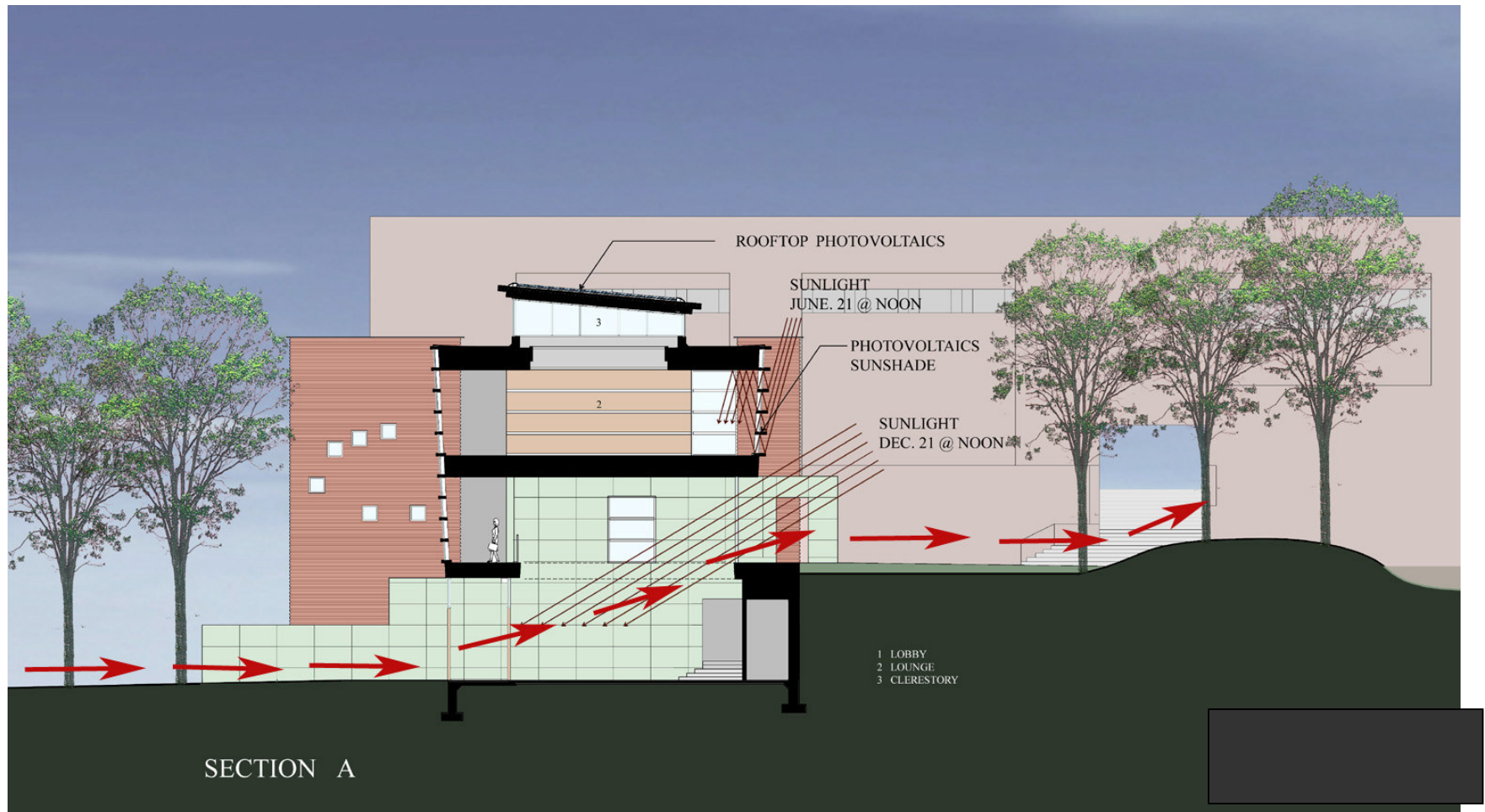
## New “Gateway”





# Cape Cod Community College – West Barnstable, MA

## Sustainable Design





# Cape Cod Community College – West Barnstable, MA

## Construction Photos - Sustainability



# Energy Savings Performance Contracts

- Comprehensive Energy and Water upgrades at existing State facilities
- Results in approx. 20 - 40 % improvement over existing energy & water use
- \$1 - 45+ Million investment per project
- Financed entirely from savings
- 33 completed projects (approx. 4 - 5 new/year)
- Approx. \$20 Million Annual Savings

# New Directions at DCAM

- LEED Silver for All Projects
- Integration of more renewable energy into projects
  - MTC Partnership for Feasibility Studies and Design & Construction \$\$
  - Development of stand-alone renewables
    - Wind Turbine at Mass Maritime Academy
- C & D Waste Recycling
- Integration of Long Term Operating Costs in Design Stage
- Construction Reform = CM at Risk